

AMENDMENT

U.S. Appln. No. 10/624,493

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claim 1. (Previously Amended) A process for producing xanthohumol present in hops comprising the steps:

- a) preparing an ethanol pure resin extract from hops, milled hops or hop powder;
- b) extracting the ethanol pure resin extract with a liquid or supercritical solvent in which the xanthohumol is insoluble;
- c) washing with a first solvent mixture the extraction residue obtained after the extraction with the liquid or supercritical solvent and separating off the first solvent mixture and substances dissolved therein;
- d) extracting with a second solvent mixture the xanthohumol from the extraction residue washed with the first solvent mixture, the first solvent mixture being more polar than the second solvent mixture; and
- e) producing from the extracted solution the extract containing the xanthohumol in high purity.

Claim 2. (Original) The process according to claim 1, wherein the ethanol pure resin extract obtained in step a), to obtain a free-flowing material, is mixed with a particulate carrier before the extraction with the liquid or supercritical solvent in which the xanthohumol is insoluble.

AMENDMENT

U.S. Appln. No. 10/624,493

Claim 3. (Previously Amended) The process according to claim 1, wherein the liquid or supercritical solvent in which the xanthohumol is insoluble is selected from the group consisting of alkanes having 1 to 6 carbon atoms, petroleum ether and carbon dioxide.

Claim 4. (Previously Amended) The process according to claim 2, wherein the particulate carrier is an organic or mineral carrier selected from the group consisting of maltodextrins, silica gels, particulate silicas, kieselguhr and magnesium silicate gels.

Claim 5. (Previously Amended) The process according to claim 2, wherein the carrier is kieselguhr.

Claim 6. (Previously Amended) The process according to claim 2, wherein the ethanol pure resin extract obtained in step a) is mixed with the particulate carrier in a weight ratio of about 1:1.

Claim 7. (Previously Amended) The process according to claim 1, wherein the ethanol pure resin extract is extracted as under step b) with supercritical CO₂.

Claim 8. (Previously Amended) The process according to claim 1, wherein the first solvent mixture is a mixture of at least one organic solvent and water.

Claim 9. (Previously Amended) The process according to claim 8, wherein the at least one organic solvent of the first solvent mixture is miscible with water in any ratio.

Claim 10. (Previously Amended) The process according to claim 9, wherein the at least one organic solvent of the first solvent mixture is selected from the group consisting of alcohols, ketones and carboxylic esters.

AMENDMENT

U.S. Appln. No. 10/624,493

Claim 11. (Previously Amended) The process according to claim 10, wherein the at least one organic solvent of the first solvent mixture is methanol and/or ethanol.

Claim 12. (Previously Amended) The process according to claim 10, wherein the at least one organic solvent of the first solvent mixture is methanol.

Claim 13. (Previously Amended) The process according to claim 9, wherein the weight ratio of the at least one organic solvent to water in the first solvent mixture is 2:3.

Claim 14. (Previously Amended) The process according to claim 1, wherein the second solvent mixture is a mixture of at least one organic solvent and water.

Claim 15. (Previously Amended) The process according to claim 14, wherein the at least one organic solvent of the second solvent mixture is miscible with water in any ratio.

Claim 16. (Previously Amended) The process according to claim 15, wherein the at least one organic solvent of the second solvent mixture is selected from the group consisting of alcohols, ketones and carboxylic esters.

Claim 17. (Previously Amended) The process according to claim 16, wherein the at least one organic solvent of the second solvent mixture is methanol and/or ethanol.

Claim 18. (Previously Amended) The process according to claim 16, wherein the at least one organic solvent of the second solvent mixture is methanol.

Claim 19. (Previously Amended) The process according to claim 15, wherein the weight ratio of the at least one organic solvent to water in the second solvent mixture is 2:1.

AMENDMENT

U.S. Appln. No. 10/624,493

Claim 20. (Previously Amended) The process according to claim 1, wherein the organic solvent of the first solvent mixture and also the organic solvent of the second solvent mixture are both methanol and the ratio of methanol to water in the first solvent mixture is 2:3 and in the second solvent mixture is 2:1.

Claim 21. (Previously Amended) The process according to claim 1, wherein the hop extract obtained in step e) contains xanthohumol at a concentration of at least 85 percent by weight, based on the dry weight of the resultant hop extract.

Claim 22. (Cancelled).